

REMARKS

Status of this application

In the Office Action mailed on December 7, 2004, Claims 8-11 were rejected under 35 U.S.C. §102(e) as being anticipated by Meltzer et al. Patent 6,542,912 (hereinafter "Meltzer"). Claims 1-5 and 12-16 were rejected under 35 U.S.C. §103(a) as being unpatentable over Meltzer in view of Perkowski Patent 6,064,979 (hereinafter "Perkowski"). Claims 6-7 and 17-18 were rejected under 35 U.S.C. §103(a) as being unpatentable over Meltzer in view of Walker et al. Patent 6,041,308 (hereinafter "Walker").

These rejections were made final, and the present amendment is being presented with a Request for Continued Examination.

This response amends independent claims 1 and 8 to more specifically claim the invention. This response requests reconsideration of the outstanding rejection based on the prior art for the reasons set forth below.

Applicants' Invention

The present invention provides methods and apparatus that permit executing application programs to obtain and process information obtained via the Internet from identified remote resources using a standard API that serves application programs that request information. The API includes a service interface program that accepts a service request identifying a particular resource from an executing application program. The service interface program obtains a specific service description corresponding to the identified resource from a services registry. The interface program then obtains input information from the requesting application, formats that input information into a request message, and transmits the request message to an Internet address specified in the fetched service description. After the remote resource returns a result message, the interface program then reformatting the received output information and supplies resulting reformatted information to the requesting application in a format specified by the fetched service description. In applicants' system, the service description is preferably stored in a service registry database in XML format.

The Meltzer system for executes commercial transactions between trading partners who exchange standard XML documents via the Internet. Meltzer uses a database which stores

service descriptions that specify the nature of the input and output documents received and transmitted via the Internet by each host computer. Meltzer's standard XML input and output document formats that are specified by the stored service descriptions. When an incoming XML document is parsed by the a given host computer, its document type is identified, the document type is used by the host to identify and invoke a transaction process for translating the incoming XML document into suitable form for transaction processing, performs the processing associated with that document type, and then forms the processing results into an XML response document that is returned via the sender to the sender. The Meltzer system uses the service description information stored in the database to publish the manner in which the service provider performs transaction processing in response to defined input XML documents to yield defined XML output documents. Meltzer also uses the service descriptions to create the translation programs needed at each host service provider to perform specified transaction processing on each an incoming XML document (see Fig. 9).

Applicants' invention as claimed differs from Meltzer's system because, *inter alia*, it defines an API that is interposed between the requesting application program and the Internet, whereas Meltzer's interface is interposed between the Internet and the service provider host that performs the transaction processing.

Applicants' invention as claimed uses a service registry that stores definitions of the input data to be obtained from the requesting application program, and a definition of the result data that is to be returned to the requesting application program. Meltzer's system uses a service registry which stores definitions of the standard XML documents sent to and from the service provider host via the Internet.

Applicants' invention as claimed uses service descriptions which specify how input processing functions obtain input data from the requesting application program and reformat that data for transmission as an Internet request message. Meltzer's system uses service descriptions which specify how each type of standard request document is to be processed by the host that performs the transaction processing host.

Applicant's invention as claimed uses service descriptions which specify how raw response data received via the Internet from a remote resource is reformatted and provided to the requesting application program. Meltzer's system uses service descriptions which specify the

format of standard XML output document that is returned via the Internet from a specified service.

Independent claims 1 and 8 have been amended by this response to more particularly point out and distinctly claim those features of applicants' invention that distinguish it over the Meltzer system. Independent claim 12 as previously submitted distinguishes over the Meltzer teaching for the reasons presented above, and further discussed below with respect to independent claims 1 and 8.

The Rejection of Claims 8-11 under 35 U.S.C. §102(e)

Claims 8-11 were rejected as being anticipated by Meltzer et al. Patent 6,542,912 (hereinafter "Meltzer").

The cited passage of Meltzer at col. 4, lines 17-31 describes a repository that holds a machine readable specification of an interface and further defines the standard input documents and the standard output documents that are exchanged via the Internet using that interface. The cited passage of Meltzer describes how such standard input documents are processed by a receiving host which parses the input document to determine its type and extract its contained data, and then invokes the service registered for documents of that type to generate output data in a standard output document format which is then returned via Internet to the requester.

Applicants' invention as set forth in claim 8-11 are instead directed to the use of a standard application program interface that serves the requesting application, allowing the requesting application to simply designate a service and provide the input data needed to form a workable request message containing that input data to a designated Internet address. The API accepts a request from the application that identifies a service, consults a service directory to identify and perform a specified input process to process the input request from the requesting application in accordance with that specification to produce a reformatted request that is transmitted to a designated Internet resource address. Thereafter, when the API receives a response from the remote resource, it invokes a specified output process for translating the raw data received via the Internet into a reformatted response following an output processing specification obtained from the services directory, and returns the reformatted response to the application program.

The Meltzer system defines the format for standard documents that are to be exchanged via the Internet, whereas applicants' invention as claimed provides an API positioned between the application program and the Internet and uses a service directory that defines how input data from an application is to be reformatted by the interface before transmission via the Internet, and how raw data returned from a designated service via the Internet is to be reformatted and returned to the application program.

The Examiner cites col. 24, line 56 to col. 25, line 5 as showing means for processing a request in accordance with an input processing specification. That passage, which refers to Figs 12-14 of Meltzer, describes how the interface at the service provider host receives an incoming standard input document, processes that document, and returns a standard output document to the requester via the Internet. This arrangement does not reformat requests before they are transmitted to a designated Internet address, and does not reformat raw data received via the Internet before it is returned to the requesting application as sent forth in claim 8.

The Rejection of Claims 1-5 and 12-16 under 35 U.S.C. §103(a)

Claims 1-5 and 12-16 were rejected under 35 U.S.C. §103(a) as being unpatentable over Meltzer in view of Perkowski Patent 6,064,979 (hereinafter "Perkowski"). The Examiner noted that Meltzer did not disclose that the network address is an Internet address, but that Perkowski discloses a database containing Internet addresses. Suffice it to say here that applicant concedes that Meltzer's network addresses could be and normally would be Internet addresses.

However, for the reasons discussed above, claim 1 as amended and independent claim 12 clearly define the use of an API between the requesting application and the Internet which consults a service description for the requested service that defines how input and output data is supplied by and returned to the requesting application. The service description specifies how the API reformats input data from the requesting application into an Internet request message, and further specifies the output processing that reformats raw data returned from the remote service via the Internet into result data that is returned to the requesting application.

Reconsideration and allowance of claims 1-18 as now presented is requested since it is believed that independent claims 1, 8 and 12 each fully distinguish over the method for

exchanging standard XML documents and for processing received standard documents into a standard result documents at the service provider host as described by Meltzer.

Respectfully submitted,



Charles G. Call, Reg. 20,406

Dated: June 7, 2005